

Should the Agency decide to rethink those elements in other rules, we believe it would be advisable to reconsider the landfill rules as well. Although we petitioners are prepared to move forward with the judicial challenge, we believe a reconsideration of the rules could lead to a better outcome without the need for litigation. While rule revisions are our ultimate goal, an administrative stay of the rules under the Administrative Procedures Act is critical to avoid forcing the regulated community and the states to begin implementing these flawed rules. Many states are already engaged in developing their mandated state plans for implementation, which are due to the EPA by May 30, so our request for a meeting is time-critical.

I am attaching a recent letter we petitioners sent to EPA prior to Administrator Pruitt's confirmation. It includes our somewhat lengthy administrative petitions. I would be happy to follow-up next week by phone to identify a convenient time on your doubtless busy schedules. Several participants will be coming from out of town, including a former colleague of Mr. Sugiyama, Mack McGuffey of Troutman Sanders, but we can be flexible in accommodating your schedules.

Thank you in advance, and I very much look forward to meeting you.

Kerry Kelly

Carter Lee "Kerry" Kelly

Senior Director, Federal Affairs

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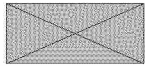
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To: Pruitt, Scott[Pruitt.Scott@epa.gov]
Cc: Dravis, Samantha[dravis.samantha@epa.gov]; Dunham, Sarah[Dunham.Sarah@epa.gov]; Tsirigotis, Peter[Tsirigotis.Peter@epa.gov]
From: Freeman, Lauren
Sent: Mon 3/27/2017 10:15:26 PM
Subject: Utility Air Regulatory Group Request for Publication of MATS Interim Reporting Rule Before April 16, 21017
[removed.txt](#)
[UARG Request for Publication of MATS Interim Reporting Rule.pdf](#)

Dear Administrator Pruitt –

On behalf of the Utility Air Regulatory Group, I attach a letter urging to you direct the publication of a previously signed final rule extending the interim electronic reporting provisions for electric generating units (EGUs) under the Mercury and Air Toxics Standards (MATS) rule. As explained in the letter, publication prior to April 16, 2017 (when the current interim period will expire) is necessary to avoid imposition of significant, unintended regulatory burdens on both EPA and EGUs.

Please feel free to contact me with any questions.



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April 18, 2017

Samantha Dravis
Associate Administrator for Policy
Office of Policy
United States Environmental Protection Agency
1200 Pennsylvania Ave., NW
Room 3513A
Washington, DC 20460

Re: March 22nd Meeting with Air Liquide S.A. Chairman and CEO Benoit Potier and
American Air Liquide Holdings, Inc. Chairman and CEO Michael Graff

Dear Associate Administrator Dravis:

On behalf of Air Liquide and our over 20,000 U.S. employees, I write to thank you for meeting with Benoit Potier and myself on March 22, 2017. We greatly appreciated your willingness to discuss Air Liquide's work related to technological innovations that help to foster important advances in energy production and reliability, while contributing positively to the environment. We share your commitment to regulatory reform and the need to strike the proper balance between protecting natural resources while providing the regulatory certainty that will allow the private sector to lead the world in innovation.

Regarding innovation, Air Liquide has advanced hydrogen use, both as a zero-emission fuel and as an energy storage medium. By leveraging the Nation's abundant supply of natural gas to produce this sustainable and multi-use fuel, the U.S. is positioning itself as a continued leader in the next wave of energy innovation. For example, we have demonstrated our ability to construct hydrogen fueling stations through our collaboration with Toyota, the maker of the hydrogen fuel cell vehicle, the Mirai, as well provide eloquent solutions to store and manage energy in support of our Nation's overburdened power grids. At your request, we will soon transmit additional materials to you regarding Air Liquide's work on hydrogen.

As you are aware, Air Liquide's American headquarters is based in Houston. We have over 20,000 employees nationwide and operate in every state of the nation to serve over 1 million customers and patients. I'm proud to point out that in just the last 5 years, we have invested close to \$17 billion in the U.S., including the acquisition of Airgas and over \$3 billion in new plants and facilities.

Our commitment to innovation and U.S. investment goes well beyond our operations, ranging from our world-class Research and Technology Center in Delaware to our over 1,200 facilities located throughout the country serving every industry's need for industrial gases, welding and safety products, as well as the medical needs for respiratory and therapeutic gases throughout the

country. Although we operate in more than 80 countries worldwide, Air Liquide in the Americas now accounts for more than forty percent of our global revenues and employee population – the great majority of which is U.S. based.

Like many domestic manufacturers, we believe that creating a fair and predictable regulatory climate is of utmost importance. Areas that we have discussed relate to rules that stifle innovation and growth due to overly-burdensome requirements or those that could cause an increase in energy costs. We look forward to working with you and your staff to identify and address these issues as they arise.

Thank you for offering to introduce Air Liquide to Administrator Pruitt. We would greatly appreciate the opportunity to meet with him, and share our views on these and additional areas of Air Liquide's leadership, such as reducing water use in hydraulic fracturing by using nitrogen or carbon dioxide foam-based fluids, reducing carbon emissions from power plants through the use of oxy-combustion technology, and other technological advances developed by Air Liquide in support of energy production and industrial operations to curb environmental impacts.

Thank you for your leadership on issues important to the United States and Air Liquide. We look forward to serving as a resource to you and the Administrator as you move forward with your critically important environmental and regulatory policy work. If you have any questions, please contact our Vice President for Public Affairs at Michael.Rosen@airliquide.com or 713-624-8023 or me at any time.

Sincerely,

A handwritten signature in dark ink, appearing to read "M. Graff", with a stylized, cursive script.

Michael J. Graff
Chairman and Chief Executive Officer
American Air Liquide Holdings, Inc.



March 27, 2017

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FILE NO: 31531.200001

Via E-Mail and U.S. Mail

The Honorable Scott Pruitt
Administrator
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W.
Mail Code: 1101A
Washington, DC 20460

**Need for Action Prior to April 16, 2017 on the Final Rule Entitled
“Mercury and Air Toxics Standards (MATS) Electronic Reporting Requirements,”
EPA-HQ-OAR-2009-0234 [FRL-9958-30-OAR] (RIN: 2060-AS75)
Extending the Interim Electronic Reporting Provisions**

Dear Administrator Pruitt:

I write on behalf of the Utility Air Regulatory Group (UARG)¹ to ask that you either submit for publication by the Office of Federal Register prior to April 16, 2017 the above-referenced final rule to preserve existing interim electronic reporting requirements for electric generating units (EGUs) under the MATS rule, or take other action to achieve the same result. That final rule, which was signed by Administrator McCarthy on January 9, 2017, responds to requests by UARG and others to keep in place interim rule provisions that allow EGUs to submit all of their electronic reports to one familiar system called ECMPS, while EPA completes an ongoing rulemaking to further revise and streamline the MATS reporting requirements. EGUs requested that EPA undertake that ongoing rulemaking to merge all of their MATS-related electronic reporting requirements into a single system. The recent final rule is necessary to extend the effectiveness of provisions that currently authorize use of that single system only through April 16, 2017.²

¹ UARG is a not-for-profit association of individual electric generating companies and national trade associations. UARG participates on behalf of certain of its members collectively in Clean Air Act administrative proceedings that affect electric generators and in litigation arising from those proceedings.

² The rule also corrects an error created in a prior rule revision that is causing confusion.

Over the past two months, UARG and others have expressed to EPA staff significant concerns about the delay in publication of the rule.³ If a rule extending the interim provisions is not published and effective prior to April 16, both EPA and EGUs will need to expend significant resources to implement new reporting requirements. EGUs would need to register with EPA to obtain access to, and learn how to use, a new system in order to submit certain reports. EPA would need to expend resources to modify that separate system so that it is capable of receiving the required MATS reports from EGUs and provide support to the new EGU users. Some of that work would need to be completed by April 16. In short, allowing the interim provisions to expire would not only be confusing and disruptive, it also would impose significant new, unreasonable, unnecessary, and unintended regulatory burdens.

For the above reasons, UARG urges you to submit for expedited publication the previously signed final rule, or take other immediate action, to ensure that the MATS interim reporting requirements do not expire on April 16. Please feel free to contact me with any questions.

Sincerely,



Lauren E. Freeman

cc: Samantha Dravis, Associate Administrator, Office of Policy
Sarah Dunham, Acting Assistant Administrator, Office of Air and Radiation
Peter Tsirigotis, Director, Sector Policies and Program Division

³ See, e.g., Memorandum from P. Tsirigotis, Director, Sector Policies and Programs Division, to S. Rees, Office Director, Office of Regulatory Policy and Management, regarding MATS Electronic Reporting Requirements Rule Communication with Regulated Community (Mar. 20, 2017), EPA-HQ-OAR-2009-0234-20617.

To: Dravis, Samantha[dravis.samantha@epa.gov]; Gunasekara, Mandy[Gunasekara.Mandy@epa.gov]; Bolen, Brittany[bolen.brittany@epa.gov]
Cc: Kelly, Kerry[KKelly5@wm.com]
From: McGuffey, Carroll Wade
Sent: Mon 5/1/2017 9:54:46 PM
Subject: RE: Follow Up
Comments on Evaluation of Existing Regulations per EO 13777.pdf

Dear Samantha, Mandy, and Brittany,

Thank you again for your continued interest in our concerns regarding the Section 111 air rules for MSW landfills. As indicated previously, we are planning to raise our concerns in comments on EPA's evaluation of existing regulations per executive order 13777. We plan to submit the comments to the docket by the deadline of May 15th, but we also thought you all might appreciate receiving a copy a bit earlier, given the time pressure I'm sure you are under with regard to these regulatory reform efforts. If you have questions, please don't hesitate to contact us at your convenience.

Mack McGuffey

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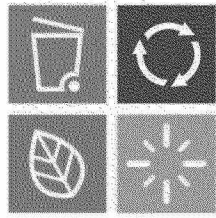
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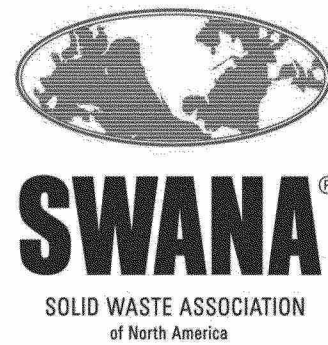
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May 1, 2017

Transmitted electronically: www.regulations.gov
Dravis.samantha@epa.gov

Ms. Samantha K. Dravis, Regulatory Reform Officer
Associate Administrator for Policy
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Mail Code 1804-A
Washington, DC 20460

Comments to Docket ID No. EPA-HQ-OA-2017-0190, Evaluation of Existing Regulations

Dear Ms. Dravis:

The National Waste & Recycling Association ("NWRA"), the Solid Waste Association of North America ("SWANA"), Waste Management, Inc. ("WM"), and Republic Services (collectively, the "Solid Waste Working Group" or "Working Group") appreciate the opportunity to provide input to the Agency on "Evaluation of Existing Regulations," 82 Fed. Reg. 17793 (April 13, 2017) to identify regulations that are appropriate for repeal, replacement or modification under Executive Order 13777, "Enforcing the Regulatory Reform Agenda."

In particular, we ask EPA to review the New Source Performance Standards (“NSPS”) and Emission Guidelines for Municipal Solid Waste (“MSW”) Landfills (the “Landfill Air Rules”). The United States Environmental Protection Agency (“EPA” or the “Agency”) has adopted two versions of those two rules—one in 1996 (“Subparts WWW and Cc” or the “1996 Rules”)¹ and one in 2016 (“Subparts XXX and Cc” or the “2016 Rules”).² **Based on our analysis of the rules and evaluation criteria, we strongly urge the Agency to administratively stay the 2016 Rules, and undertake rulemaking actions to address problematic provisions and evaluate cost-effective reforms.** These comments are consistent with our petition for Rulemaking, Reconsideration, and Administrative Stay of the 2016 Rules, submitted to EPA on October 27, 2016 (the “Administrative Petition”), which remains pending.³ In addition, we ask EPA to review the 1996 Rules alongside the review of the 2016 Rules that is now required by executive order. Only through reviewing all of the Landfill Air Rules together will EPA and the industry be able to craft a reasonable set of regulations to protect human health and the environment while minimizing regulatory burden and cost.

The Solid Waste Working Group represents a broad base of the waste management sector, with NWRA as the leading trade association, and SWANA as the leading professional association for public and private waste management officials in the sector. WM and Republic are leading waste service providers, with over 400 active MSW landfills between them, many of which have been subject to the Landfill Air Rules, as well as the *National Emission Standards for Hazardous Air Pollutants* at 40 C.F.R. Part 63, Subpart AAAA (the “Landfill NESHAP”). The members of the Working Group have gained over two decades of valuable insight and experience in complying with those rules. Further, the members of the Working Group have actively engaged with EPA in the implementation of the rules, working closely with EPA’s Office of Air Quality, Planning and Standards personnel for over a decade to accomplish necessary revisions and clarifications to the rules. The members of the Working Group commented extensively on rulemaking proposals published in 2002 and 2006, and more recently in 2014 and 2015.⁴

¹ 40 C.F.R. Part 60, Subparts WWW & Cc. *See also* 40 C.F.R. Part 62, Subpart GGG (EPA’s Federal Plan implementing the MSW Landfill emission guidelines).

² 40 C.F.R. Part 60 Subparts XXX & Cc; *see also* “Standards of Performance for Municipal Solid Waste Landfills,” 81 Fed. Reg. 59332-59384 (Aug. 29, 2016); and “Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills,” 81 Fed. Reg. 59276-59330 (Aug. 29, 2016).

³ Petition for Rulemaking, Reconsideration, and Administrative Stay (Oct. 27, 2016) (filed by NWRA, SWANA, Republic Services, WM, and Waste Management Disposal Services of Pennsylvania, Inc.).

⁴ *See* NWRA & SWANA Comments on 2014 Proposal, EPA-HQ-OAR-2003-0215-0108 & EPA-HQ-OAR-2014-0451-0062 and Comments on 2015 Supplemental Proposal, EPA-HQ-OAR-2003-0215-0196 & EPA-HQ-OAR-2014-0451-0186; Republic Services, Comments on Proposed Standards of Performance for Municipal Solid Waste Landfills, EPA-HQ-OAR-2003-0215-0099, Comments on Supplemental Proposal, EPA-HQ-OAR-2003-0215-0202, Comments on the Advanced Notice of Proposed Ruling Making for Emission Guidelines, EPA-HQ-OAR-2014-0451-0061, and Comments on Proposed Rules; Emission Guidelines, EPA-HQ-OAR-2014-0451-0176; Waste Management, Inc., Comments on 2014 Proposal, EPA-HQ-OAR-2003-0215-0100 and Comments on 2015 Supplemental Proposal, EPA-HQ-OAR-2003-0215-0198 & EPA-HQ-OAR-2014-0451-0192. Additionally, members of the Working Group provided supplemental information at EPA-HQ-OAR-2003-0215-0003, EPA-HQ-OAR-2003-0215-0007, EPA-HQ-OAR-2003-0215-0053, EPA-HQ-OAR-2003-0215-0055, EPA-HQ-OAR-2003-0215-0057, & EPA-HQ-OAR-2003-0215-0058.

Although the Working Group supports EPA's regulatory reform efforts, we are not seeking a complete repeal of all regulations governing the control and management of MSW landfill gas. On the contrary, the members of the Working Group view proper landfill gas management as a fundamental requirement of providing competent and reliable waste management services and have a strong commitment to environmental stewardship and full regulatory compliance, as illustrated by the success of the industry in reducing landfill gas emissions substantially and continuously for many decades. In short, we recognize the necessity of regulation, but support EPA's effort to ensure all regulations are, indeed, necessary.

We believe that the Landfill Air Rules present significant opportunities for regulatory reform, consistent with EPA's request for information and Executive Order 13777, because they are confusing, inconsistent, unnecessarily burdensome, impose costs far greater than benefits, and are based on Executive actions that have been repealed. Although EPA determined that the best system of emission reduction ("BSER") underlying the rules had not changed, EPA nevertheless inappropriately finalized more stringent compliance obligations for both new and existing sources in accordance with President Obama's now-rescinded Climate Action Plan and strategy to Reduce Methane Emissions.⁵ Further, EPA justified the new, more stringent standards using the Social Cost of Carbon and Methane, which no longer represents an authorized policy for regulatory decision-making. The 2016 Rules also fail to include reasonable streamlining provisions that the industry and EPA have worked cooperatively over many years to address a variety of concerns identified in the 1996 Rules.

For these reasons, as further discussed below, we believe that the best means of remedying the significant flaws and reforming the Landfill Air Rules is an immediate administrative stay of the 2016 Rules, and an Agency commitment to a new rulemaking process. We look forward to working with EPA in developing the revisions needed to ensure the regulations governing the control of landfill gas are appropriate, regular, and effective.

A. The 2016 Rules Derive From and Implement Executive Orders and Presidential Directives That Have Been Rescinded.

The 2016 Rules—Subparts XXX and Cf—must be repealed, replaced, or modified because the rules are based in substantial part on three Obama-era executive actions that have been rescinded by President Trump, including: (1) President Obama's Climate Action Plan,⁶ (2) President Obama's Methane Strategy,⁷ and (3) the Social Cost of Methane.⁸

⁵ Climate Action Plan-Strategy to Reduce Methane Emissions, March 2014, at 5.

⁶ "The President's Climate Action Plan," Executive Office of the President, June 2013 (<https://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf>).

⁷ "Climate Action Plan Strategy to Reduce Methane," Executive Office of the President, March 2014 (https://www.whitehouse.gov/sites/default/files/strategy_to_reduce_methane_emissions_2014-03-28_final.pdf).

⁸ Social Cost of CH₄, Marten et al. (2014).

When finalizing the 2016 Rules, EPA stated that the rules are “consistent with the President’s 2013 Climate Action Plan” and “the President’s Methane Strategy” and that the rules are “an important element of the United States’ work to reduce emissions that are contributing to climate change.”⁹ As discussed in greater detail below, EPA was not required to modify or revise the Landfill Air Rules, but did so anyway in order to advance President Obama’s climate policies. Furthermore, in justifying the costs of EPA’s burdensome and unnecessary revisions to the Landfill Air Rules, EPA quantified the supposed benefits of its 2016 Rules by relying on the Social Cost of Methane, without which the Agency could not have justified the costs of the rules.

On March 28, 2017, President Trump signed the “Presidential Executive Order on Promoting Energy Independence and Economic Growth,” E.O. 13783. Executive Order 13783 revokes several earlier climate-related Executive actions, including the Climate Action Plan and the Methane Strategy.¹⁰ Furthermore, the Executive Order withdraws the use of the Social Cost of Methane for regulatory decision making and declares that the framework “is no longer representative of government policy.”¹¹ Because the Executive Order has revoked the climate-related policies that serve as the basis for EPA’s 2016 Rules, EPA should immediately suspend the rules and promptly convene a proceeding to review and revise them.

B. The 2016 Rules Are Unnecessary and Ineffective.

The 2016 Rules are unnecessary or ineffective regulations that are appropriate candidates for repeal, replacement, or modification because: (1) they increased the stringency of existing Clean Air Act (“CAA”) Section 111 standards governing MSW landfills based on the directives contained in President Obama’s now-rescinded Climate Action Plan and Methane Strategy, rather than on any statutory mandate to do so; and (2) many aspects of the 2016 Rules have added significant compliance burdens to the existing standards, creating inconsistent, inappropriate, or unworkable conditions for regulated MSW landfills.

1. The 2016 Rules Unnecessarily Reduced the NMOC Emission Threshold.

Since 1996, MSW landfills have been subject to standards promulgated under Sections 111(b) and 111(d) of the CAA: the Standards of Performance for Municipal Solid Waste Landfills set forth at 40 C.F.R. Part 60, Subpart WWW governing new sources; and the Emission Guidelines and Compliance Times for Existing Municipal Solid Waste Landfills set forth at 40 C.F.R. Part 60, Subpart Cc governing existing sources. The primary compliance mechanism under the 1996 Rules was the installation and operation of a gas collection and control system (“GCCS”) for landfills that meet certain size and non-methane organic compound (“NMOC”)

⁹ 81 Fed. Reg. at 59333; 81 Fed. Reg. at 59277.

¹⁰ E.O. 13783, Section 3.

¹¹ *Id.* at Section 5.

emission rate thresholds. In 2003, EPA promulgated the Landfill NESHAP under Section 112 of the CAA, which references and requires compliance with the substantive requirements of the 1996 Rules (Subparts WWW and Cc). Through the obligation to install and maintain a GCCS, the 1996 Rules and the Landfill NESHAP have been largely effective at controlling emissions from MSW landfills, reducing emissions substantially and continuously for two decades.

EPA promulgated Subpart XXX in 2016 pursuant to CAA Section 111(b), governing new sources, which requires EPA to review each NSPS once every eight years.¹² After concluding such review, EPA is not required to revise an NSPS unless the Agency determines that it is appropriate to do so. Even as it adopted the new 2016 Rules, EPA acknowledged that the 1996 Rules already effectively controlled landfill gas emissions. For example, in the preamble to EPA's 2014 proposal, EPA stated that a well-designed and well-maintained GCCS remains BSER for MSW landfills and observed that the obligations in the 1996 Rules concerning operation of a GCCS "continue to **ensure that the collection system efficiently collects landfill gas.**"¹³ EPA further noted that the GCCS design and operation standards in the 1996 Rules remain "the best format" for regulating air emissions from MSW landfills.¹⁴ Despite conceding that the regulatory framework in the 1996 Rules continues to be appropriate and that the GCCS requirement remains BSER for the landfill sector, EPA nevertheless decided to promulgate the 2016 Rules, reducing the NMOC emission threshold for installing a GCCS from 50 Mg/year to 34 Mg/year. EPA cited President Obama's Climate Action Plan and Methane Reduction Strategy as an important impetus for these reductions.

Likewise, with the promulgation of Subpart Cf, EPA determined to increase the stringency of requirements governing existing MSW landfills under Section 111(d) of the Clean Air Act, despite any authority in that section to do so, and despite the Agency's determination that the 1996 Rules continue to reflect BSER. Unlike CAA Section 111(b) governing new sources, CAA Section 111(d) does not permit EPA to review and revise Emission Guidelines applicable to existing sources.¹⁵ In promulgating Subpart Cf, EPA claimed that the Agency has "discretion to [conduct a review of Emission Guidelines] when circumstances indicate that it is appropriate."¹⁶ Until the promulgation of the 2016 Rules, however, EPA had never before revised and tightened already existing final Emission Guidelines published under CAA Section 111(d). As a direct result of EPA's unprecedented action, existing sources with emissions below the 50 Mg/yr threshold may now be required to add controls that they had not planned for and that would not have been required under the 1996 Rules.

EPA justified the costs of installing a GCCS at a lower NMOC threshold on the basis that "substantial reduction in emissions of landfill gas and its constituent components, **including**

¹² 42 U.S.C. § 7411(b).

¹³ *Standards of Performance for Municipal Solid Waste Landfills*; Proposed Rule, 79 Fed. Reg. 41796, 41802 (July 17, 2014).

¹⁴ *Id.* at 41802.

¹⁵ Compare 42 U.S.C. § 7411(b) and 7411(d).

¹⁶ 81 Fed. Reg. at 59277.

methane, will result.”¹⁷ According to EPA, further reductions of methane emissions (which is not the regulated pollutant under the rules) is important because “MSW landfills continue [] to be the third-largest source of methane emissions in the U.S.,” which represents “1.9 percent of total U.S. GHG emissions in carbon dioxide equivalent.”¹⁸ It is “[f]or these reasons . . . EPA is finalizing changes to the Emission Guidelines.”¹⁹ If the Agency’s motivations were in doubt, the next five pages of the Subpart Cf Preamble discuss climate impacts associated with methane emissions, while the public health effects associated with NMOC emissions – the regulated pollutant under these rules – are limited to a single paragraph of discussion.²⁰

Finally, after essentially conceding that the 2016 Rules were adopted only to advance the Climate Action Plan and Methane Reduction Strategy, EPA justified the costs associated with the NMOC emission threshold primarily by relying on the now-rescinded Social Cost of Methane, which purports to quantify the climate-related benefits of methane reduction. This controversial and unproven metric, derived from the Agency’s Social Cost of Carbon framework, far overstated the benefits of reducing the NMOC emission rate trigger for the GCCS requirement. As discussed in greater detail in Section E, below, EPA cannot justify the costs of the 2016 Rules without the Social Cost of Methane, and should therefore restore the NMOC emission threshold to 50 Mg/yr.

2. The Landfill Air Rules Are Ineffective.

In its preamble to the final 2016 Rules, EPA noted that one basis for promulgating the rules was the need for clarification of certain aspects of the 1996 Rules.²¹ Indeed, over the past decade, many stakeholders, including members of the Working Group, have worked with EPA to identify necessary revisions and clarifications to the 1996 Rules.²² With the proposed issuance of revised Landfill Air Rules, we were hopeful that EPA would improve the rules in a manner that provides clear and achievable compliance expectations for the regulated community. Instead, some of the provisions in the 2016 Rules actually exacerbate or simply fail to address many of the problems that regulated landfills faced under the 1996 Rules. A comprehensive discussion of some of the major problems with new 2016 Rules can be found in the Working Group’s Administrative Petition.

Rather than highlight the many issues in the rules that are in dire need of correction, the remainder of this section focuses on provisions in the 2016 Rules that relate to approval of GCCS design plans, wellhead monitoring parameters, and corrective action procedures. These

¹⁷ *Id.* at 59278.

¹⁸ *Id.* at 59281.

¹⁹ 81 Fed. Reg. 59281.

²⁰ *See id.* at 59282-59287.

²¹ 81 Fed. Reg. at 59333.

²² For a discussion of the numerous issues that stakeholders worked to address with EPA since the issuance of the 1996 Rules, we refer EPA to the submissions referenced in footnotes 3 and 4 above, and incorporated fully by reference into this letter.

issues are among the most significant problems that stakeholders have identified for EPA over the course of two decades of implementing the 1996 Rules and demonstrate that the 2016 Rules are ineffective at addressing these issues.

a. **Gas Collection and Control System (GCCS) Design Plan**

Given the site-specific nature of landfills, each owner/operator is required to prepare a GCCS design plan that applies the collection and control requirements to the unique circumstances presented at each landfill. A GCCS design plan, prepared with the assistance of a licensed, third-party professional engineer, essentially operates as a landfill's user manual, specifying how the GCCS should operate, and is therefore the primary means for complying with the Landfill Air Rules. Under the 1996 Rules, landfills experienced a very low rate of agency review and approval of GCCS design plans, including alternatives to the design standards and operating parameters, leaving many facilities without any certainty as to whether the GCCS design plan requirements were met or whether their alternatives are appropriate. Presumably to correct these issues, EPA solicited comments on streamlining the GCCS design plan approval process. Rather than make improvements to the rules, however, the 2016 Rules ***have significantly worsened the compliance uncertainty associated with GCCS design plan review and approval.***

For example, the 2016 Rules require that each GCCS design plan be approved, but leaves the decision to review a submitted design plan entirely to the discretion of EPA or the delegated state authority.²³ EPA has thus created a system by which a landfill owner/operator is required to submit a GCCS design plan for agency approval, but neither EPA nor its state or local counterparts are held accountable for actually reviewing and approving, or disapproving, those plans.

This uncertainty is compounded by the failure of the 2016 Rules to provide clarity on whether landfills must proceed with installation of a GCCS without agency approval. For example, the rules state that without having obtained approval, a landfill *may* continue with implementation of the design plan, recognizing that they would "be proceeding at their own risk."²⁴ This permissive and unprecedented language fails to inform the regulated entity what it should or must do when the relevant agency has not provided approval, and is directly at odds with other provisions in the rules that expressly require actions to be taken in accordance with an approved design plan.²⁵

Further, the 2016 Rules do not suspend a landfill's compliance obligations pending design plan approval, including the obligation to seek applicable permits, award contracts, and

²³ See 40 C.F.R. §§ 60.767(c)(5)-(6) & 60.38f(d)(5)-(6).

²⁴ 40 C.F.R. § 60.767(c)(6); 40 C.F.R. § 60.38f(d)(5) and (6).

²⁵ 40 C.F.R. § 60.765(b) ("each owner or operator of a controlled landfill must place each well or design component as specified in the **approved** design plan").

install and start up a GCCS within 30 months of the regulatory trigger. The net result of the revised design plan approval process is a Kafkaesque choice for landfill owners/operators: face potential enforcement risk for missing the 30-month compliance deadline in the rules, or face potential financial *and* enforcement risk for installing and operating a multi-million-dollar gas collection system in accordance with a design plan that may later be disapproved.

The 2016 Rules create even further confusion by concluding the design plan approval process with the following statement:

In the event that the design plan is required to be modified to obtain approval, the owner or operator must take any steps necessary to conform any prior actions to the approved design plan and any failure to do so could result in an enforcement action.²⁶

This unintelligible language does not explain how “prior actions” can be conformed to a newly imposed requirement and does not state whether the resulting enforcement risk is retroactive, prospective, or both. Furthermore, it makes clear that EPA did not consider the significant financial risks associated with installing a multi-million dollar gas collection system pursuant to a plan that may later be deemed insufficient. This risk is particularly acute for landfills that need alternative designs to operate a GCCS, given that alternatives must be approved by the relevant agency.

Thus, the 2016 Rules fail to provide the essential regulatory element of fair and timely notice of compliance obligations and therefore must be revised to provide certainty to regulated landfills. The Working Group suggests that EPA eliminate the need for agency review and approval of GCCS plans, which is a system that has simply not worked to date. Instead, we recommend that delegated authorities should be allowed to rely upon a licensed, third-party professional engineer’s certification of design plans and revisions in lieu of an agency review and approval process, with certified plans maintained onsite for inspection and/or submittal to the implementing agency, consistent with other standards adopted by EPA.²⁷ In the event EPA continues to believe that design plan review and approval is necessary, we ask the Agency to consider a defined timeframe for such review and a deemed approval in the event that the reviewing agency fails to respond in a timely manner.

b. Temperature Well-Head Parameter

The 1996 Rules require landfills to conduct regular monitoring to verify that each GCCS wellhead meets certain operating parameters, including limits for pressure, temperature, and either oxygen or nitrogen. In working with EPA on improvements to the 1996 Rules, members

²⁶ 40 C.F.R. § 60.767(c)(5) and 40 C.F.R § 38f(d)(5).

²⁷ The Working Group identified 62 other CAA rules with similar provisions in the supplemental comments cited in footnote 4, above.

of the Working Group expressed their concerns that the temperature and oxygen/nitrogen wellhead monitoring parameters are counterproductive to optimal operation of a GCCS. In response to these concerns, EPA proposed to eliminate both the oxygen/nitrogen parameter and the temperature parameter. We submitted comments supporting EPA's proposal because it recognized that the parameters are not good indicators of a well-functioning GCCS. Unfortunately, EPA retained the temperature parameter in the 2016 Rules and only eliminated the oxygen/nitrogen parameter.

Although the Working Group appreciates EPA's decision to remove from the 2016 Rules the oxygen/nitrogen parameter, nearly two decades of experience implementing the rules has demonstrated that the temperature parameter is a poor indicator of landfill fires or inhibited waste decomposition. To comply with this arbitrary temperature parameter, sites must often reduce landfill gas flow to the affected well, thereby decreasing system performance and ***potentially increasing emissions***. Furthermore, conforming operations to satisfy the temperature parameter imposes significant administrative burdens on both regulatory agencies and the regulated community. The Preambles to the 2016 Rules claim that EPA retained the temperature parameter because of concerns raised by commenters about landfill fires. Wellhead temperature values, however, are not an indicator of GCCS performance or landfill fires. Given that wellhead temperature is not a good indicator of system performance, EPA should eliminate it from the Landfill Air Rules.

c. Corrective Action Procedures

The 1996 Rules require landfills to take corrective actions when exceedances of wellhead operating parameters are discovered. Under those rules, corrective actions must be completed within 15 days, and an alternative timeline prepared if that schedule cannot be met. Under the 1996 Rules, a landfill is not required to obtain agency approval for alternative timelines that do not exceed 120 days. Nonetheless, inconsistent implementation of these requirements by states and EPA regions led to confusion and unanswered alternative timeline requests. Despite EPA's goal to clarify these procedures, the corrective action procedures in the 2016 Rules, much like the design plan procedures discussed above, have become more complicated and leave regulated landfills subject to increased compliance burden and even greater uncertainty.

The corrective action schedule in the 2016 Rules is far more complex, requiring a root cause analysis and submission of a corrective action plan to the relevant agency for review and approval if certain stringent timeframes cannot be met. For example, under the 2016 Rules, a corrective action must be taken within five days of an exceedance of a wellhead parameter. If a corrective action cannot be completed within 15 calendar days of the first measured exceedance, the owner/operator is required to "conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after" the exceedance was

measured.²⁸ For any corrective action that is not completed within 60 days, the owner/operator must notify EPA “as soon as practicable but no later than 75 days” after measuring the exceedance.²⁹ If the owner/operator expects the corrective action to take longer than 120 days to complete, the owner/operator must submit to EPA all of the following: (1) the root cause analysis; (2) the corrective action analysis; and (3) a corresponding implementation timeline.³⁰ These materials must be submitted “as soon as practicable, but not later than 75 days after the first” measured exceedance.³¹ The Administrator “must approve the plan for corrective action and the corresponding timeline.”³² These procedures are highly complicated, overly burdensome, and like the design plan procedures, do not require agencies to respond to such submittals.

Because these new procedures significantly increase administrative burdens for both affected facilities and agencies, EPA must simplify the corrective action procedures in the Landfill Air Rules. The Working Group suggests that EPA eliminate the approval process for alternative corrective action procedures and timeframes altogether. This approach would be consistent with 40 C.F.R. Part 60, Subpart Ja (NSPS for petroleum refineries), which obligates sources to conduct root cause analyses but does not require agency approval of corrective actions.

C. The 2016 Rules Create a Serious Inconsistency and Interfere with Regulatory Reform Initiatives and Policies.

In promulgating the 2016 Rules without terminating the applicability of the 1996 Rules, the Agency has created an unintelligible web of regulation that now imposes two inconsistent standards on every landfill. In addition, the 2016 Rules ignore efforts made over many years by EPA and the solid waste industry to streamline the 1996 Rules, and instead render the rules more stringent based solely on the now-rescinded Climate Action Plan and Methane Reduction Strategy. These concerns likewise justify a full review of the Landfill Air Rules under Executive Order 13777.

1. The Landfill Air Rules Impose Inconsistent Requirements on All Landfills.

In the 2016 Rules, EPA adopted applicability provisions that fail to consider the applicability provisions of the 1996 Rules. EPA also failed to consider the Landfill NESHAP, which requires compliance with either Subparts WWW or Cc of the 1996 Rules. In its rule preamble, EPA acknowledged that the “updates” and “revisions” that it intended to make could have been adopted within the existing Subparts WWW and Cc by updating and revising those

²⁸ 40 C.F.R. § 60.765(a)(3)(i) & (5)(i) & 40 C.F.R. § 60.36f(a)(3)(i) & (5)(i).

²⁹ 40 C.F.R. § 60.767(j)(2) & 40 C.F.R. § 60.38f(k)(2).

³⁰ 40 C.F.R. § 60.765(a)(3)(iii) & (5)(iii) & 40 C.F.R. § 60.36f(a)(3)(iii) & (5)(iii).

³¹ 40 C.F.R. § 60.767(j)(1) & 40 C.F.R. § 60.38f(k)(1).

³² *Id.*

subparts.³³ Instead, EPA forged a more complicated path by promulgating two entirely new subparts—Subparts XXX and Cf. Thus, the applicability provisions for all five rules (the 1996 and 2016 versions of the NSPS and EG, plus the landfill NESHAP) are now codified as follows:

- ☐ **Subpart Cc:** landfills constructed / modified “before May 30, 1991”³⁴
- ☐ **Subpart WWW:** landfills constructed / modified “on or after May 30, 1991”³⁵
- ☐ **Subpart Cf:** landfills constructed / modified “on or before July 17, 2014”³⁶
- ☐ **Subpart XXX:** landfills constructed / modified “after July 17, 2014”³⁷
- ☐ **Subpart AAAA:** landfills that are major sources or area sources meeting certain design capacity thresholds must comply with WWW or Cc³⁸

Because of these overlapping applicability provisions, every single landfill in the country will necessarily meet the applicability criteria of two inconsistent subparts—one from 1996, and one from 2016—as illustrated in the table provided below:

Landfills that were last constructed / modified ...	Emission Guidelines for 111(d) “Existing Sources”		NSPS for 111(b) “New Sources”	
	Cc (1996)	Cf (2016)	WWW (1996)	XXX (2016)
... before May 30, 1991	×	×		
... on or between May 30, 1991 & July 17, 2014		×	×	
... after July 17, 2014			×	×

This overlapping applicability is unreasonable because it would require landfills to simultaneously comply with different and overlapping provisions from both the 1996 and 2016 Rules. In doing so, EPA is forcing landfills to meet all provisions of the 2016 Rules without allowing landfills to benefit from the regulatory provisions that EPA intended to update and streamline, since the 1996 Rules still apply as originally adopted. As just one example, EPA eliminated the oxygen parameter as a basis for requiring corrective action in the 2016 Rules, but the 1996 Rules continue to require all landfills to take corrective action for any oxygen exceedances.

³³ See 81 Fed. Reg. at 59333, FN 3.

³⁴ 40 C.F.R. § 60.32c.

³⁵ 40 C.F.R. § 60.750.

³⁶ 40 C.F.R. § 60.31f.

³⁷ 40 C.F.R. § 60.760.

³⁸ 40 C.F.R. §§ 63.1935; 63.1955.

These overlapping applicability provisions also contravene the CAA because they have the effect of simultaneously regulating most landfills—those last modified between 1991 and 2014—as both “new” landfills subject to an NSPS and “existing” landfills subject to an emission guideline. That result is not only logically inconsistent, but prohibited by the CAA, which defines the two terms “new source” and “existing source” in mutually exclusive fashion³⁹ and establishes separate programs for “new” and “existing” sources (Section 111(b) for new sources, and Section 111(d) for existing sources).

EPA’s own statements confirm that the Agency did not intend for landfills to comply with both the 1996 Rules and 2016 Rules simultaneously. The most obvious indication of EPA’s intent is the reference to the 2016 Rules as a “revision,” “update,” or “changes” to the 1996 Rules.⁴⁰ However, EPA’s failure to enact appropriate applicability provisions in the 2016 Rules renders them inconsistent with the 1996 Rules that still apply. Landfills are thus left with a set of regulations unlike any EPA has ever imposed on any industry. All of the other NSPS revisions that EPA has ever adopted make clear that only one NSPS subpart should apply at a time (and EPA has never before revised an emission guideline). For example, when EPA revised the standard for stationary combustion turbines by adopting a new Subpart KKKK, EPA confirmed that sources subject to that new subpart would be “exempt” from the provisions of the pre-existing requirements of Subpart GG.⁴¹ Similarly, after EPA adopted a new standard in Subpart Da for fossil fuel-fired steam generators, EPA revised the old Subpart D to make clear that any facility subject to the new standard “is not subject” to the old standard.⁴² Many other subparts contain language of similar effect to avoid the overlap of pre-existing and newly revised standards.⁴³

Due to the serious regulatory inconsistencies that EPA created in 2016 when it adopted different requirements in new Subparts XXX and Cc without terminating the applicability of the 1996 Rules, the 2016 Rules easily qualify as rules that contain severe inconsistencies, which must be reviewed under Executive Order 13777.

2. The Landfill Air Rules Interfere with Decade-Long Efforts to Reform the MSW Landfill NSPS and Emission Guidelines.

Executive Order 13777 also requires the review of rules that “otherwise interfere with regulatory reform initiatives and policies.” The 2016 Rules meet that criterion because they interfere with and ignore numerous streamlining provisions that EPA and the landfill industry

³⁹ The CAA defines “existing source” as “any stationary source other than a new source.” 42 U.S.C. §7411(a)(6).

⁴⁰ See e.g., 81 Fed. Reg. at 59276 (“Based on this review, the EPA has determined that it is appropriate to revise the Emission Guidelines.”).

⁴¹ 40 C.F.R. § 60.4305 (“Stationary combustion turbines regulated under this subpart [KKKK] are exempt from the requirements of subpart GG of this part.”).

⁴² 40 C.F.R. § 60.40 (“Any facility subject to . . . subpart Da . . . of this part is not subject to this subpart.”).

⁴³ See, e.g., 40 C.F.R. Part 60, Subparts Ea, Eb, K, Ka, Kb, AA, AAa, J, Ja, VV, VVa, GGG, GGGa, AAAA, BBBB, CCCC, DDDD, EEEE, & FFFF.

had developed over many years. Efforts at streamlining the 1996 Rules began in 2002—fifteen years ago—based on a shared concern and understanding that the 1996 Rules were unnecessarily burdensome in several ways. For example, at various points in the rule development process, both EPA and the industry agreed that the corrective action requirements for any exceedances of an oxygen or temperature wellhead parameter were not only unnecessary, but potentially counter-productive to effective landfill gas control.

However, in the 2016 Rules, EPA ignored many of the streamlining provisions it had previously considered and evaluated with input from the solid waste sector, and instead focused primarily on implementing President Obama’s Climate Action Plan and Methane Reduction Strategy. As a result, the 2016 Rules became more onerous than the 1996 Rules, not less. In addition, it appears many of the streamlining provisions were dropped or significantly altered at the last moment in the rulemaking process, long after they had been proposed and supported by many favorable comments. For example, even though EPA had proposed to eliminate from the 1996 Rules the requirement for corrective action following exceedances of an arbitrary temperature parameter, the final 2016 Rules retained that requirement.

Since the 2016 Rules failed to include important revisions needed to correct various flaws in the 1996 Rules, the 2016 Rules interfered with the efforts at reforming those rules. Therefore, the 2016 Rules must be reviewed under Executive Order 13777, and EPA should initiate a new review of the 1996 Rules to make the reforms needed to minimize the regulatory burdens they impose.

D. The Data Underpinning the Reduced NMOC Threshold, the Wellhead Temperature Operating Standard, and the Tier 4 Wind Speed Restrictions do not meet Federal Requirements for Transparency or Reproducibility.

1. NMOC Threshold

EPA provided no technical or scientific justification for finalizing the reduced NMOC regulatory standard of 34 Mg/year in the 2016 Rules. EPA provided no substantiation that the original requirement to install landfill gas controls where NMOC emissions exceeded 50 Mg/year, as required by the 1996 Rules, is no longer appropriate. In reviewing the technical, policy and economic materials in the rulemaking docket, the Working Group was unable to obtain the underlying data supporting EPA’s decision to lower the NMOC threshold, and we were unable to reproduce the Agency’s analysis. Our comments on the proposed rules described our concerns in detail.⁴⁴ EPA responded by indicating that it provided technical justification for lowering the NMOC threshold in the rule preambles, but the Agency did not respond to the concerns about lack of transparency, access to data, or problems with reproducibility of their analysis and conclusions.

⁴⁴ See EPA-HQ-OAR-2003-0215-0099.1 (comment excerpt 20, and comment response).

We were not alone in criticizing the lack of robust and transparent data underpinning the rulemakings. In their Petition for Reconsideration, Sierra Club, Friends of the Earth, Institute for Local Self-Reliance and Center for a Competitive Waste Industry wrote,

The underlying documentation used in the development of the rule that was released online with the Federal Register notices did not provide sufficient detail to replicate the calculation of the methane reductions attributed to the rule change claimed by EPA.⁴⁵

And further,

Petitioners disputed EPA's claimed methane reductions in part on the basis that the documentation was too obscure to make it possible for anyone else to replicate the calculations, which is a necessary step to validate the claimed emission reductions.⁴⁶

EPA itself described the lack of robust data used in assessing potential emissions reductions in the preamble to the final Emission Guidelines Rule:

With the data available, we are not able to provide health benefit estimates for the reduction in exposure to HAP, ozone, and PM2.5 for this rule. This is not to imply that there are no such benefits of the rule; rather, it is a reflection of the difficulties in modeling the direct and indirect impacts of the reductions in emissions for this sector with the data currently available.⁴⁷

Without having otherwise justified the revisions to the rules, EPA relied heavily on the President's Climate Action Plan, Methane Strategy, and Social Cost of Methane to rationalize the increased costs of the lowered standard in the 2016 Rules; however, these documents have been rescinded.

Furthermore, the Agency's regulatory and cost analysis was based on a total of five modeled landfills to represent landfills opening during 2010-2014, combined with five landfills for which construction was already planned. This led EPA to project 10 future landfills subject to the revised Emission Guidelines. In addition, 11 model landfills were created that would be subject to the NSPS. As Sierra Club et. al further noted:

However, the models used to calculate the claimed emission reductions remained obscure. No details were provided to explain anything about what those models (or more accurately "surrogates") consisted of or how they were constructed or validated. Nor did EPA state why it did not simply directly calculate the changes in emissions at the

⁴⁵ Petition for Reconsideration by the Sierra Club, Friends of the Earth, Institute For Local SelfReliance And Center For a Competitive Waste Industry, at 4 (Oct. 29, 2016) (the "Sierra Club Petition").

⁴⁶ *Id.* at 4-5.

⁴⁷ 81 Fed. Reg. at 59280.

landfills it said it had identified as being affected by the rules, rather than resorting to inapposite, and nontransparent “surrogates.”⁴⁸

2. Wellhead Temperature Operating Standard

In the 2015 Supplemental Proposal for the NSPS, EPA proposed to remove the operational standards for temperature and nitrogen/oxygen from the 1996 Rules, but would still have required monthly monitoring for the parameters. The Working Group commented favorably on EPA’s proposal and stated that by removing these parameters, EPA would be eliminating the most significant barriers to installation of interim gas control measures. The Working Group also commented that the parameters often required landfill owner/operators to request higher operating values (“HOVs”), the granting of which created administrative burdens for state regulators and the industry, and the requests were often delayed or refused by state agencies due to lack of expert resources.

EPA asserted in the preambles of the final 2016 Rules that the reason the temperature parameter was retained is due to EPA’s concerns about landfill fires. However, the Working Group submitted lengthy comments demonstrating that the 55-degree Celsius wellhead operating parameter is an arbitrary limit that is unrelated to landfill fires or anaerobic decomposition. Although EPA acknowledged the comments as a rationale for eliminating the temperature limit from the 1996 Rules, the Agency reversed course in the final 2016 Rules with little explanation beyond citing in a footnote a study entitled “Subsurface Heating Events at Solid Waste and Construction and Demolition Debris Landfills: Best Management Practices.”⁴⁹ An assessment of the study was not available in the docket, nor did EPA explain how the study supported the Agency’s decision to reverse course in the 2016 Rules.

Further, there is nothing in the record or docket to support setting a temperature standard and EPA did not provide a valid reason for deviating from its proposal to eliminate the temperature well-head parameter. In fact, the temperature parameter undercuts EPA’s BSER determination for the landfill sector (i.e. a well-designed and well-operated GCCS). As discussed in Section B, above, temperature is an arbitrary parameter that may actually hinder optimal GCCS operation because sources may need to capture less gas in order to avoid exceeding the temperature limit. Given that the temperature parameter contributes to poor operation of a GCCS, EPA must remove the temperature-based corrective action requirements from the Landfill Air Rules.

3. Tier 4 Wind Speed Restrictions

In the 2016 Rules, EPA altered the proposed methodology for conducting Tier 4; i.e., the collection of site-specific data to more precisely determine NMOC emissions for purposes of

⁴⁸ Sierra Club Petition, at 4.

⁴⁹ 81 Fed. Reg. at 59349, fn 39.

evaluating when a GCCS must be installed. Although the development of a Tier 4 methodology was well received in concept, the final rules included unnecessary and ineffective restrictions on the use of Tier 4. These new requirements rendered the Tier 4 monitoring technically impracticable to implement. EPA proposed to limit the use of Tier 4 when the average wind speed exceeds 5 miles per hour and the instantaneous wind speed exceeds 10 miles per hour.⁵⁰ The Working Group, among other commenters, submitted comments urging EPA not to finalize the proposed wind-speed restrictions, which members of the Working Group identified as unsupported by the available science and unduly restrictive.⁵¹ Neither the Working Group nor any other commenters had any opportunity to comment on use of a wind barrier as an alternative to the wind speed restrictions because there was no indication in any of EPA's proposals that would suggest wind barriers were under consideration.

In the Final 2016 Rules, EPA reduced the wind speed restriction from 5 mph to 4 mph and added a new requirement to use a wind barrier.⁵² EPA failed to support the wind-speed restrictions with required and relevant analysis, did not undertake to demonstrate that wind barrier technology is available to be implemented at subject landfills, and has greatly underestimated the increased burden such requirements will impose on sites with low site-specific emission rates.

E. The Landfill Air Rules Impose Costs that Exceed Benefits.

Executive Order 13777 requires EPA to review the 2016 Rules because the costs of the rules far exceed their benefits. Not only are the costs far more significant than the benefits, they are also far more real, in that the rules will require existing and new landfills to incur significantly higher operating and compliance expenses. In contrast, EPA has made no effort to explain how the relatively miniscule emission reductions that the rules are intended to achieve will improve the lives of anyone in the real world. Instead, the alleged benefits of the rule are entirely dependent on a speculative and flawed "social cost" analysis that has now been rescinded by Executive Order 13783.⁵³ Since the real costs far outweigh the essentially non-existent benefits, the 2016 Rules impose an "unnecessary regulatory burden" that EPA must review. In addition, the Working Group asks EPA to review the 1996 Rules alongside the review of the 2016 rules required under Executive Order 13777 because many individual provisions of the 1996 rules likewise impose unnecessary costs.

⁵⁰ See 80 Fed. Reg. at 52135-36.

⁵¹ See e.g. WM 2015 Comments at 15-16.

⁵² 40 C.F.R. §§ 60.764 (a)(6)(iii)(A) & 40 C.F.R. 60.35f(a)(6)(iii)(A).

⁵³ Note that Executive Order 13783 also expressly requires EPA to "as soon as practicable" suspend, revise, or rescind the Landfill Air Rules because they are related to an arose out of President Obama's Climate Action Plan and Strategy to Reduce Methane Emissions.

1. The Costs of the 2016 Rules Are Significant and Real.

EPA's own cost estimates confirm that the 2016 Rules represent an "economically significant regulatory action"⁵⁴ as defined in Executive Order 12866—*i.e.*, a regulation imposing more than \$100 million in cost. Specifically, EPA estimated that the reduction in the NMOC emission rate trigger would require more landfills to install a GCCS, adding \$93 million in cost *each year* for existing landfills and \$11 million in cost *each year* for new landfills.⁵⁵ Although new control installations on lower-emitting landfills are only one possible source of additional costs imposed under the 2016 Rules, these costs alone are significant and confirm that the rules warrant further review. These significant cost increases exacerbate a total regulatory burden already borne by the industry of more than \$700 million per year under the 1996 Rules, according to EPA's own estimates.⁵⁶

In addition to more stringent control requirements, the 2016 Rules also impose costly new procedural requirements. EPA estimated the new testing and monitoring costs necessary to comply with the 2016 Rules at around \$840,000 for all landfills,⁵⁷ but those estimates are woefully low because they only reflect the additional costs for landfills that must install a control system for the first time under the new rules. EPA's estimates thus fail to account for many new requirements that apply to all landfills with a control system, regardless of when it was installed.

The most significant of the new monitoring requirements imposed under the 2016 Rules is the requirement to monitor all cover penetrations quarterly. EPA ignored the costs associated with the new cover penetration monitoring requirement because EPA characterized it as a mere "clarification" of the 1996 Rules, which already require quarterly surface monitoring. However, the 1996 Rules make abundantly clear that penetration monitoring is *only* required where elevated gas concentrations have been observed, not at *every* penetration,⁵⁸ and that approach has been standard industry practice for decades. In reality, the new requirement to monitor *all* cover penetrations under the 2016 Rules⁵⁹ will likely at least double the quarterly monitoring costs for every landfill in the country. EPA took no account of that significant cost increase in its regulatory impact analyses.

EPA's estimates also take no account of the many new recordkeeping and reporting requirements imposed by the 2016 Rules, including a completely new corrective action root cause analysis procedure. Although EPA may have assumed that these new procedures would

⁵⁴ 81 Fed. Reg. at 59366; 81 Fed. Reg. at 59309.

⁵⁵ 81 Fed. Reg. at 59362, Table 2, note e; 81 Fed. Reg. at 59305, Table 2, note e.

⁵⁶ *Id.* at Table 2.

⁵⁷ *Id.* at Table 2, note e.

⁵⁸ 40 C.F.R. § 60.753(d) (requiring monitoring "where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover").

⁵⁹ 40 C.F.R. § 60.763(d) (requiring monitoring "where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover and all cover penetrations").

not add significant new costs because they were intended to replace the procedures already required under the 1996 Rules, the 2016 Rules require entirely new records and reports on an entirely different schedule, adding significant cost while providing no additional health or environmental benefits. Further, EPA's failure to terminate the 1996 Rules leaves landfills subject to an overlapping and confusing set of duplicative requirements that exacerbate the costs of the new procedures.

As another example, the 2016 Rules require any landfills that have recirculated liquids to submit an annual report that contains voluminous information about liquids addition practices. However, EPA has conceded that it does not have sufficient information to justify imposing a specific standards on landfills that add liquids,⁶⁰ and so the 2016 Rules do not impose any different substantive requirements on such landfills. Thus, EPA has imposed a significant recordkeeping and reporting burden that provides absolutely no real benefit. To the extent EPA wishes to gain a better understanding of how liquids addition may affect emissions, EPA should rely on its information gathering authority, instead of imposing an unjustified compliance obligation under a program that only authorizes EPA to establish standards based on adequately demonstrated control technology and practices.⁶¹

In its regulatory impact analysis for the 2016 Rules, EPA attempted to offset the increased regulatory burden somewhat by claiming that many landfills newly required to install controls would be able satisfy that requirement by constructing landfill-gas-to-energy projects. EPA assumed that the sale of electricity generated by those projects would provide a revenue stream that would offset the additional regulatory costs associated with the 2016 Rules. However, EPA's assumption is incorrect, in that it fails to recognize that most of the landfills that would be required to control emissions for the first time under the new rules would be lower-emitting landfills that likely would not generate enough landfill gas to make an energy project economically viable. Further, the economics of siting landfill gas-to-energy projects are complicated, require much more gas to be viable than EPA assumes, and often involve third parties that are not governed by the Landfill Air Rules. EPA's assumption that gas-to-energy income would offset increased compliance costs is vastly overstated and oversimplified. Thus, EPA should ignore those purported offsets in evaluating the regulatory burden imposed by the 2016 Rules.

In sum, EPA's own cost estimates for the 2016 Rules, although significant, severely underestimate the real costs that landfills will incur. However, even those underestimated costs significantly outweigh the essentially non-existent benefits of the 2016 Rules, which are briefly described below.

⁶⁰ See 81 Fed. Reg. at 59345 & 81 Fed. Reg. at 59289 ("EPA did not receive sufficient data to support a separate subcategory for landfills adding leachate or other liquids.")

⁶¹ See 42 U.S.C. § 7411(a) (defining "standards of performance" as those the Administrator has determined to be "adequately demonstrated").

2. The Alleged Benefits of the 2016 Rules Are Insignificant and Illusory.

Even at face value, the benefits that EPA sought to achieve with the 2016 Rules are minimal. For all of the additional cost imposed by the rules, EPA projected only a three percent reduction in emissions.⁶² And, unlike most other significant rules that EPA has adopted in recent years, EPA made no attempt to assign a health-based value to explain how these minor reductions will provide any real health or environmental benefits.

Instead, EPA claimed that “climate benefits” justify the 2016 Rules. However, even after converted to 8.2 million tons per year (tpy) of carbon dioxide equivalent (CO₂e), using a relatively high multiplier for the “global warming potential” of methane, the result remains inconsequential once put into context. Though perhaps a large value in appearance, the promised CO₂e reduction is a small fraction of total landfill methane emissions of 115.7 million tpy CO₂e. The projected reduction appears even smaller when compared to total U.S. methane emissions of 655.7 million tpy CO₂e, largely due to the fact that landfills only account for 17.6 percent of the country’s methane emissions (landfills are only the third largest anthropogenic source of methane emissions, behind oil and gas production and enteric fermentation).⁶³

The methane reductions that EPA attributed to the 2016 Rules also appear miniscule in comparison to total anthropogenic greenhouse gas (GHG) emissions in the United States. In spite of the higher global warming potential assigned to methane, that pollutant still only accounts for 10 percent of the country’s total GHG emissions.⁶⁴ As such, the relatively small methane reduction that EPA projected as a result of the 2016 Rules is only a tiny portion of the total U.S. GHG emissions of over 6,500 million tpy CO₂e. Moreover, U.S. GHG emissions are only about 15 percent of total global anthropogenic GHG emissions,⁶⁵ which reached 49 gigatons CO₂e in 2010, a massive total that the 2016 Rules could not possibly influence enough to provide actual, real-world benefits to anyone.⁶⁶

In spite of the clear and obvious fact that the GHG emission reductions projected by EPA will not have any real effect on global climate trends, EPA relied on the “social costs” of methane and CO₂ in attempting to justify the 2016 Rules with a monetized value. Specifically, EPA concluded that, based on those “social costs” analyses, the 2016 Rules would provide a net benefit of \$390 million and \$62 million (for the NSPS and emission guidelines, respectively).⁶⁷ In those calculations, EPA even claimed additional benefits based on CO₂ reductions from power plants that have nothing to do with landfills, again based on the false assumption that

⁶² 81 Fed. Reg. at 59362; 81 Fed. Reg. at 59305.

⁶³ See Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2015, at ES-15.

⁶⁴ *Id.* at ES-8.

⁶⁵ <https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>

⁶⁶ IPCC, 2014: Summary for Policymakers. In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

⁶⁷ 81 Fed. Reg. at 59366 (NSPS); 81 Fed. Reg. at 59309 (EG).

the 2016 Rules would encourage new landfill-gas-to-energy projects, which EPA counted as an offset to overall power plant demand.

In determining whether the 2016 Rules warrant review under Executive Order 13777, EPA should ignore all of these illusory benefit calculations. If nothing else, Executive Order 13783 clearly prohibits EPA from relying on the “social cost” analyses, which should eliminate from consideration all of the benefits that EPA was able to monetize when it adopted the rules. That result is appropriate in light of the many fundamental flaws inherent in the “social cost” analyses, chief among them the unfairness inherent in comparing a short-term U.S. cost estimate to a highly speculative and extraordinarily long-term guess about potential global benefits. And even those “social cost” analyses actually admit that reducing all U.S. GHG emissions to zero “would be far from enough to avoid substantial climate change,”⁶⁸ further confirming that the minor reductions required by the 2016 Rules would be meaningless. Although EPA also claimed that the rules would produce some forms of benefits that could not be monetized, the inability to quantify those benefits suggests they must be truly infinitesimal.

3. The 2016 Rules’ Real Costs Far Exceed the Alleged Benefits.

All told, the costs of the 2016 Rules are real and significant—at least \$100 million by EPA’s own estimate, and perhaps many times that amount—while the benefits are essentially zero, given that they are based entirely on a flawed, and now rescinded, “social cost” analysis. Accordingly, the 2016 Rules easily qualify as rules that “impose costs that exceed benefits” and therefore warrant a full review under Executive Order 13777.

4. EPA Should Also Review the Provisions of the 1996 Rules that Impose Costs Greater Than Benefits.

To ensure the 1996 Rules are no more burdensome than necessary to ensure appropriate control of landfill gas, the Working Group asks EPA to review the 1996 Rules alongside the review of the 2016 Rules that is now required by executive order. Only through reviewing all of the Landfill Air Rules together will EPA and the industry be able to work together in crafting a reasonable set of regulations to protect human health and the environment while minimizing regulatory burden and cost.

* * *

The Working Group appreciates your consideration of our comments and recommendations. We look forward to continuing to work with you on the development of regulatory proposals for revising the Landfill Air Rules. If you have any questions, please do not hesitate to contact any of the undersigned Working Group representatives at your earliest convenience.

⁶⁸ Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (revised 2015), at 14.

To: Zelsermyer, Salo[Salo.Zelsermyer@valero.com]
Cc: Scott Segal[scott.segal@bracewell.com]
From: Dravis, Samantha
Sent: Sun 6/25/2017 11:21:31 PM
Subject: Re: Alert: Trump to Call for U.S. 'Dominance' in Global Energy Production

Please ping me on this next week for a follow up.

Sent from my iPad

On Jun 25, 2017, at 9:05 AM, Zelsermyer, Salo <Salo.Zelsermyer@valero.com> wrote:

Morning Samantha -- saw this and wanted to just point out that the idea we discussed would fit nicely with this theme. Look forward to catching up sometime this week.

Best

Salo

Subject: Alert: Trump to Call for U.S. 'Dominance' in Global Energy Production

Trump to Call for U.S. 'Dominance' in Global Energy Production

By Jennifer A. Dlouhy | June 25, 2017 07:00AM ET | Bloomberg Government

Donald Trump will tout surging U.S. exports of oil and natural gas during a week of events aimed at highlighting the country's growing energy dominance.

The president also plans to emphasize that after decades of relying on foreign energy supplies, the U.S. is on the brink of becoming a net exporter of oil, gas, coal and other energy resources.

As with previous White House policy-themed weeks, such as a recent one focusing on infrastructure, the framing is designed to draw attention to Trump's domestic priorities and away from more politically

Energy: Oil and Gas: Hydraulic Fracturing News Alert

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motion the reversal of an array of Obama-era policies that discourage both the production and consumption of fossil fuels.

ship more

ordered agencies

considering

televised address

jdlohy1@bloomberg.net

imorgan97@bloomberg.net

[Manage Alerts](#)

To: cknauss@hunton.com[cknauss@hunton.com]
From: Dravis, Samantha
Sent: Mon 7/10/2017 1:54:26 PM

Hi Charles,

Can you send me a copy of the petition for reconsideration by the Air Permitting Forum on refrigerant management requirements?

Thanks,
Samantha

Sent from my iPad

To: Brown, Samuel L.[SIBrown@hunton.com]; Traylor, Patrick[traylor.patrick@epa.gov]
From: Dravis, Samantha
Sent: Fri 8/25/2017 1:00:49 PM
Subject: RE: Environmental Law Institute | Speaker Invitation

Hi Samuel,

I'm available.

From: Brown, Samuel L. [mailto:SIBrown@hunton.com]
Sent: Thursday, August 24, 2017 8:31 PM
To: Traylor, Patrick <traylor.patrick@epa.gov>
Cc: Dravis, Samantha <dravis.samantha@epa.gov>
Subject: RE: Environmental Law Institute | Speaker Invitation

Hi Patrick & Samantha

Just checking in to see if you're interested and available to join the ELI conference and panel in D.C. on Dec. 4? Thanks! – Sam

From: Brown, Samuel L.
Sent: Monday, August 14, 2017 8:02 PM
To: Traylor, Patrick
Cc: Dravis, Samantha
Subject: RE: Environmental Law Institute | Speaker Invitation

Hi Patrick,

Of course.

In terms of the panel's format, I think we have two options: (1) each of you speaks on a topic(s)

with a slide deck and we leave 15 minutes at the end for Q&A; or (2) I prepare a list of questions on relevant topics and I ask each of you questions in a more informal conversation format. In my experience, I enjoy moderating panels that use the latter format. Using that format I think we can convey the same information, but the panels tend to be more interesting, with increased audience attention. That being said, I defer to your preference, either way works for me.

In terms of substance, the working title of the panel is: *EPA Regulatory Reform and Enforcement Trends: What Does the Future Hold?* Bottom line, I think most people outside the Agency are curious about the change(s) in direction of this EPA from the prior Administration on certain subject matter and the practical implications. For example, for this panel, in the context of enforcement, what are EPA's enforcement priorities; are there plans to modify the existing NEIs; what is the fate of the prior administration's focus on next generation compliance; etc. In the context of policy/regulatory reform, EPA's thoughts on the comments received as part of the regulatory reform efforts per Exec. Order 13777; what action item(s) have resulted/will result; thoughts on reform on how EPA conducts rulemaking/considers science; are there any planned organizational/institutional reforms; and, generally, an update on the priorities of the Trump Administration and Administrator Pruitt.

Bottom line is folks would love to hear from both of you, and the scope of the subject matter covered should only be what you're comfortable covering, so we can tailor the subject matter to fit your preferences. For example, if we use the latter format above, I would draft a set of questions and then have you screen them for sensitive subject matter that you don't want to cover as part of the panel and conversation.

In terms of the ELI event, other panels will cover (i) waters of the United States; (ii) citizen suits; (iii) State implementation: issues and opportunities; (iv) emerging issues in water quality; (v) stormwater and eNGO-related litigation; (vi) water transfers and the Second Circuit opinion; among other issues. There are other confirmed and invited EPA speakers (from OGC, OW, and Regions), other federal agencies (e.g., Corps), and state agencies (e.g., Ben Grumbles, Maryland, Secretary of the Environment; Michael Lauffer, Chief Counsel, California State Water Resources Control Board; Tom Johnson, Solicitor General, West Virginia; and Basil Seggos, Commissioner, New York State, Department of Environmental Conservation), in addition to the private sector and academia.

I hope that gives you a better sense of the panel and the event. Please let me know if you have additional question or if you'd like to chat on the phone. I hope it works out that you're both able to participate and I look forward to working with you.

Samantha, FYI, my colleagues Rod Hastie and Joe Stanko were going to extend the invitation to you. After speaking with Rod, it appears they had not reached out yet, so I apologize if this conversation is coming out of the blue.

Thanks! – Sam

HUNTON & WILLIAMS Samuel Brown

Senior Attorney

slbrown@hunton.com

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f 415.975.3775

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San Francisco, CA 94105

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From: Traylor, Patrick [<mailto:traylor.patrick@epa.gov>]
Sent: Monday, August 14, 2017 4:57 PM
To: Brown, Samuel L.
Cc: Dravis, Samantha
Subject: RE: Environmental Law Institute | Speaker Invitation

Sam:

Would you mind giving us some more information on how you'd like the panel to work and what you might want us to cover?

Best,

Patrick

Patrick Traylor

Deputy Assistant Administrator

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

(202) 564-5238 (office)

(202) 809-8796 (cell)

From: Brown, Samuel L. [<mailto:SlBrown@hunton.com>]

Sent: Monday, August 14, 2017 12:18 PM

To: Traylor, Patrick <traylor.patrick@epa.gov>

Subject: Environmental Law Institute | Speaker Invitation

Hi Patrick,

I am reaching out because I am helping to plan the Environmental Law Institute's (ELI) conference on the Clean Water Act (CWA) on December 4-5 in Washington D.C. ELI sponsors this event every year and I've been involved for some time. It is for private and public sector professionals experienced in the CWA (not an introductory-level conference).

I am putting together a panel on *EPA Regulatory Reform and Enforcement Trends: What Does the Future Hold?* I was hoping you could join this panel on Monday, December 4. I will be the moderator. The other folks invited to the panel are:

- Samantha Dravis, AA, EPA Office of Policy.
- Mark Ryan, Ryan and Kuehler (former EPA attorney for 25+ years).

It would be great if you could join the panel to discuss enforcement. Please let me know if you have any questions or would like more information on the event.

Thanks! – Sam

HUNTON & WILLIAMS **Samuel Brown**

Senior Attorney

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To: McGuffey, Carroll Wade[mack.mcguffey@troutmansanders.com]; Gunasekara, Mandy[Gunasekara.Mandy@epa.gov]; Bolen, Brittany[bolen.brittany@epa.gov]
Cc: Kelly, Kerry[KKelly5@wm.com]
From: Dravis, Samantha
Sent: Tue 5/2/2017 11:54:35 AM
Subject: RE: Follow Up

Thank you.

From: McGuffey, Carroll Wade [mailto:mack.mcguffey@troutmansanders.com]
Sent: Monday, May 01, 2017 5:55 PM
To: Dravis, Samantha <dravis.samantha@epa.gov>; Gunasekara, Mandy <Gunasekara.Mandy@epa.gov>; Bolen, Brittany <bolen.brittany@epa.gov>
Cc: Kelly, Kerry <KKelly5@wm.com>
Subject: RE: Follow Up

Dear Samantha, Mandy, and Brittany,

Thank you again for your continued interest in our concerns regarding the Section 111 air rules for MSW landfills. As indicated previously, we are planning to raise our concerns in comments on EPA's evaluation of existing regulations per executive order 13777. We plan to submit the comments to the docket by the deadline of May 15th, but we also thought you all might appreciate receiving a copy a bit earlier, given the time pressure I'm sure you are under with regard to these regulatory reform efforts. If you have questions, please don't hesitate to contact us at your convenience.

Mack McGuffey
TROUTMAN SANDERS
Direct: 404.885.3698 | Mobile: 770.402.0727
mack.mcguffey@troutmansanders.com

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FOR PUBLICATION

**UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

UNITED STATES OF AMERICA,
Plaintiff-Appellee,

v.

JOSEPH DAVID ROBERTSON,
Defendant-Appellant.

No. 16-30178

D.C. No.
6:15-cr-00007-
DWM-1

OPINION

Appeal from the United States District Court
for the District of Montana
Donald W. Molloy, Senior District Judge, Presiding

Argued and Submitted August 29, 2017
Seattle, Washington

Filed November 27, 2017

Before: M. Margaret McKeown and Ronald M. Gould,
Circuit Judges, and Barbara Jacobs Rothstein,*
District Judge.

Opinion by Judge Gould

* The Honorable Barbara Jacobs Rothstein, United States District
Judge for the Western District of Washington, sitting by designation.

SUMMARY**

Criminal Law

The panel affirmed convictions for violating the Clean Water Act (CWA) by knowingly discharging dredged or fill material from a point source into a water of the United States without a permit; willfully injuring and committing depredation of property of the United States, causing more than \$1,000 worth of damage to the property; and knowingly discharging dredged or fill material from a point source into a water of the United States on private property without a permit.

The defendant's first trial ended with a hung jury, and the defendant was convicted after a second trial.

The panel rejected the defendant's contention that the Government did not establish that there was jurisdiction under the CWA. The panel held that *Northern California River Watch v. City of Healdsburg*, 496 F.3d 993 (2007) (holding that Justice Kennedy's concurrence in *Rapanos v. United States*, 547 U.S. 715 (2006), is the controlling test for determining CWA jurisdiction), is not clearly irreconcilable with *United States v. Davis*, 825 F.3d 1014 (9th Cir. 2016) (en banc), and remains binding precedent. The panel held that the district court did not err in determining that CWA jurisdiction existed under the "significant nexus" test set forth in Justice Kennedy's concurrence in *Rapanos*.

** This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

The panel rejected the defendant's contentions that the statutory term "waters of the United States" is unconstitutionally vague and that he did not have fair warning of the meaning of that term.

The panel held that a criminal defendant cannot challenge the sufficiency of the evidence at a previous trial following conviction at a subsequent trial. The panel therefore deemed foreclosed the defendant's argument that the district court should have granted his motion to acquit after the jury deadlocked at his first trial.

The panel held that the district court did not abuse its discretion in allowing the Montana State Program Manager for the Army Corps of Engineers and Supervisory Civil Engineer to testify as an expert witness. The panel held that the district court did not abuse its discretion in excluding an Army Corps of Engineers guidance manual or a crystal mine study.

COUNSEL

Michael Donahoe (argued), Deputy Federal Public Defender; Anthony R. Gallagher, Federal Defender; Federal Defenders of Montana, Helena, Montana; for Defendant-Appellant.

John David Gunter II (argued) and Robert Stockman, Attorneys; John C. Cruden, Assistant Attorney General; Environment & Natural Resources Division, United States Department of Justice, Washington, D.C.; Bryan R. Whittaker and Eric E. Nelson, Office of the United States Attorney, Helena, Montana; for Plaintiff-Appellee.

Roger I. Roots, Livingston, Montana, for Amici Curiae The Constitution Society and Founder and President Jon Roland.

Anthony L. François, Pacific Legal Foundation, Sacramento, California, for Amici Curiae Chantell and Michael Sackett, John Duarte, and Duarte Nursery Inc.

OPINION

GOULD, Circuit Judge:

Between October 2013 and October 2014, Joseph David Robertson excavated and constructed a series of ponds on National Forest System Lands and on the privately owned Manhattan Lode mining claim. In the process of creating these ponds, Robertson discharged dredged and fill material into the surrounding wetlands and an adjacent tributary, which flows to Cataract Creek. Cataract Creek is a tributary of the Boulder River, which in turn is a tributary of the Jefferson River—a traditionally navigable water of the United States. Robertson was warned by an EPA Special Agent that his activities “very likely” required permits. Yet, he did not get permits to build the ponds or to discharge dredged or fill material into waters of the United States.

The Forest Service soon learned of Robertson’s activities. And on May 22, 2015, a grand jury charged Robertson with three criminal counts. Count I charged Robertson with knowingly discharging dredged or fill material from a point source into a water of the United States without a permit in violation of the Clean Water Act (CWA), 33 U.S.C. § 1251–1388. Count II charged Robertson with willfully injuring and committing depredation of property of the United States, namely National Forest Service Land,

causing more than \$1,000 worth of damage to the property, in violation of 18 U.S.C. § 1361. Count III charged Robertson with another CWA violation for knowingly discharging dredged or fill material from a point source into a water of the United States on private property without a permit.

Robertson's initial jury trial was held from October 5 to October 8, 2015. At the close of the Government's case and at the close of the presentation of evidence, Robertson unsuccessfully moved for a judgment of acquittal under Federal Rule of Criminal Procedure 29. That first jury trial ended with a hung jury, and the judge declared a mistrial. Robertson again moved for acquittal on all three counts, arguing that the Government's evidence was insufficient to sustain a conviction. The district court denied this motion.

Robertson's second jury trial was held from April 4 to April 7, 2016. Robertson again moved for acquittal on all three counts after the close of the Government's case and at the close of evidence. And the district court again denied both motions. On April 7, 2016, the jury returned guilty verdicts on all three counts. On April 21, 2016, Robertson renewed his motions for acquittal and moved for a new trial. The district court denied those motions, concluding that the verdict was supported by sufficient evidence.

Robertson timely filed this appeal, over which we have jurisdiction pursuant to 28 U.S.C. § 1291.

I

Robertson argues (1) that the Government did not establish that there was CWA jurisdiction, and (2) that he lacked fair warning of the scope of CWA jurisdiction. He also (3) challenges the sufficiency of evidence at an earlier

trial that ended in a mistrial; (4) appeals some evidence rulings; and (5) contests the calculation of restitution.¹

We review the district court's interpretation of the jurisdictional bounds of the CWA *de novo*. See *United States v. Lewis*, 67 F.3d 225, 228 (9th Cir. 1995). We also review whether a statute is unconstitutionally vague *de novo*. See *United States v. Cooper*, 173 F.3d 1192, 1202 (9th Cir. 1999). We review the challenged evidence rulings and a challenge to the district court permitting an expert to testify for abuse of discretion. See *United States v. W.R. Grace*, 504 F.3d 745, 759 (9th Cir. 2007); *United States v. Layton*, 767 F.2d 549, 553 (9th Cir. 1985).

II

We look first at the CWA jurisdiction issue. To assess Robertson's arguments on these points, some background on the CWA and the cases that have interpreted it is necessary. Congress enacted the CWA "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). To meet this goal, the CWA prohibits the discharge of dredge or fill material into "navigable waters" unless authorized by a permit from the Secretary of the Army through the Army Corps of Engineers ("the Corps"). *Id.* §§ 1311(a), 1311(d), 1344(a). Any person who knowingly violates § 1311 by discharging a pollutant without a permit "shall be punished" by a fine, imprisonment, or both. *Id.* § 1319(c)(2).

¹ We address and reject Robertson's challenge to the district court's ruling compelling Robertson to bear a part of the costs of his defense in the concurrently filed memorandum disposition.

At issue on jurisdiction is the meaning of “navigable waters,” and the reach of the CWA. “Navigable waters” is defined as “the waters of the United States, including the territorial seas.” *Id.* § 1362(7). For there to be CWA jurisdiction here then, the creek and wetlands that Robertson polluted had to be “waters of the United States.”

The reach of the Corps’ jurisdiction over “navigable waters” is controversial and has been the subject of many Supreme Court cases. *See, e.g., United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985) (upholding a Corps’ regulation that extended the Corps’ authority under § 1344 to wetlands “adjacent to navigable or interstate waters and their tributaries”); *Solid Waste Agency of N. Cook Cty. v. U.S. Army Corps of Eng’rs*, 531 U.S. 159 (2001) (invalidating the Corps’ “Migratory Bird Rule” because the Corps does not have CWA jurisdiction over non-navigable, isolated, intrastate waters that are not adjacent to open water).

Central to this appeal is the Supreme Court’s fractured 4-1-4 decision, *Rapanos v. United States*, 547 U.S. 715 (2006). In that case, the Court confronted the issue of whether wetlands, which did not contain or directly abut traditionally navigable waterways, were “waters of the United States” subject to the Corps’ jurisdiction under the CWA. *See id.* at 729–30 (plurality); *id.* at 759 (Kennedy, J., concurring in the judgment). In answering this question, the Court had to address whether the Corps’ regulations were a permissible interpretation of the CWA. The regulations had interpreted “waters of the United States” very broadly, including not just traditionally navigable interstate waters, but also

“[a]ll interstate waters including interstate wetlands,” [33 C.F.R.] § 328.3(a)(2); “[a]ll

other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce,” [*id.*] § 328.3(a)(3); “[t]ributaries of [such] waters,” [*id.*] § 328.3(a)(5); and “[w]etlands adjacent to [such] waters [and tributaries] (other than waters that are themselves wetlands),” [*id.*] § 328.3(a)(7). The regulation defines “adjacent” wetlands as those “bordering, contiguous [to], or neighboring” waters of the United States. [*Id.*] § 328.3(c). It specifically provides that “[w]etlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are ‘adjacent wetlands.’” [*Id.*]

Rapanos, 547 U.S. at 724 (plurality).

The plurality opinion, authored by Justice Scalia, and joined by Chief Justice Roberts, and Justices Thomas and Alito, concluded that the Corps’ regulations were not “based on a permissible construction of the statute.” *Id.* at 739 (quoting *Chevron U.S.A. Inc. v. Nat. Res. Def. Council*, 467 U.S. 837, 843 (1984)). The plurality held that “the phrase ‘the waters of the United States’ includes only those relatively permanent, standing or continuously flowing bodies of water ‘forming geographic features’ that are described in ordinary parlance as ‘streams[,] . . . oceans, rivers, [and] lakes.’” *Id.* (quoting Webster’s Second 2882) (alterations in original). The term, according to Justice

Scalia’s opinion, “does not include channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall.” *Id.* The plurality went on to conclude that wetlands are covered by the CWA only if two conditions are met: first, “the adjacent channel contains a ‘wate[r] of the United States,’ (*i.e.*, a relatively permanent body of water connected to traditional interstate navigable waters);” and second, “the wetland has a continuous surface connection with that water, making it difficult to determine where the ‘water’ ends and the ‘wetland’ begins.” *Id.* at 742 (alteration in original). The plurality ultimately remanded the case to the lower court so that it could determine, in the first instance, whether the wetlands at issue were subject to the CWA under the new standard.

Justice Kennedy, providing the fifth vote supporting the judgment concurred in the judgment but rejected the plurality’s test and outlined his own test to determine whether a wetland that is not adjacent to and does not contain a navigable-in-fact water is subject to the CWA. *See id.* at 758–59, 768–78 (Kennedy, J., concurring in the judgment). Justice Kennedy concluded that the Corps could reasonably interpret the CWA to cover “impermanent streams,” *id.* at 770, and he concluded that the “Corps’ definition of adjacency is a reasonable one,” *id.* at 775. Justice Kennedy held that the Corps could exercise CWA jurisdiction over a wetland only if there was “a significant nexus between the wetlands in question and navigable waters in the traditional sense.” *Id.* at 779; *see also id.* at 767. He explained, “wetlands possess the requisite nexus, and come within the statutory phrase ‘navigable waters,’ if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily

understood as ‘navigable.’” *Id.* at 780. When “wetlands’ effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term ‘navigable waters.’” *Id.*

Four members of the Court joined in a dissent authored by Justice Stevens. His dissent concluded that *Riverside Bayview* controlled the cases, that the Corps’ regulations were a reasonable interpretation of the CWA, and that any wetland that is adjacent to navigable waters or their tributaries is subject to the CWA. *See Rapanos*, 547 U.S. at 787, 792 (Stevens, J., dissenting). He disagreed with both the plurality and with Justice Kennedy. He noted that “Justice Kennedy’s approach had far fewer faults,” and concluded that both decisions “fail[ed] to give proper deference to the agencies entrusted by Congress to implement the Clean Water Act.” *Id.* at 810. The dissenting Justices would have upheld the Corps’ jurisdiction in the cases at issue in *Rapanos* “and in all other cases in which either the plurality’s or Justice Kennedy’s test is satisfied.” *Id.* at 810. Indeed, although the dissent “assume[d] that Justice Kennedy’s approach will be controlling in most cases because it treats more of the nation’s waters as within the Corps’ jurisdiction,” the dissent would uphold jurisdiction when *either* test was met—even “in the unlikely event that the plurality’s test is met but Justice Kennedy’s is not.” *Id.* at 810 n.14; *see also id.* at 810. The dissent also stated that “in these and future cases the United States may elect to prove jurisdiction under either test.” *Id.* at 810 n.14.

All this paints a rather complex picture, and one where without more it might not be fair to expect a layman of normal intelligence to discern what was the proper standard to determine what are waters of the United States. But the

substance of that picture was clarified by later decisional law within the Ninth Circuit.

Specifically, in *Northern California River Watch v. City of Healdsburg*, a precedent that is critical to our decision today, we held that Justice Kennedy’s opinion was the controlling opinion from *Rapanos*. 496 F.3d 993, 995 (2007). We explained that because it is “the narrowest ground to which a majority of the Justices would assent if forced to choose in almost all cases, . . . Justice Kennedy’s concurrence provides the controlling rule of law for our case.” *Id.* at 999–1000; *see also United States v. Moses*, 496 F.3d 984, 990 (9th Cir. 2007) (recognizing Justice Kennedy’s “opinion as the controlling rule of law”); *San Francisco Baykeeper v. Cargill Salt Div.*, 481 F.3d 700, 707 (9th Cir. 2007) (“Justice Kennedy’s *controlling concurrence* explained that only wetlands with a significant nexus to a navigable-in-fact waterway are covered by the Act” (emphasis added)). In reaching this conclusion, we relied upon *United States v. Gerke Excavating, Inc.*, 464 F.3d 723 (7th Cir. 2006). *See City of Healdsburg*, 496 F.3d at 999–1000. In *Gerke*, the Seventh Circuit had explained that Justice Kennedy’s test—which it also found to be controlling—was “narrower (so far as reining in federal authority is concerned) than the plurality’s in most cases.” 464 F.3d at 724–25. The Eleventh Circuit has also concluded that Justice Kennedy’s test is controlling. *See United States v. Robison*, 505 F.3d 1208, 1221 (11th Cir. 2007) (concluding that under the facts of *Rapanos*, Justice Kennedy’s opinion is the narrowest and controlling).

Other circuits have adopted different approaches. The First, Third, and Eighth Circuits have explicitly concluded that the federal Government can establish CWA jurisdiction if it can meet either the plurality’s or Justice Kennedy’s

standard. *United States v. Johnson*, 467 F.3d 56, 64–66 (1st Cir. 2006); *United States v. Donovan*, 661 F.3d 174, 176, 182 (3d Cir. 2011); *United States v. Bailey*, 571 F.3d 791, 799 (8th Cir. 2009). The Fourth Circuit has used Justice Kennedy’s test, without deciding whether the plurality’s test could provide an alternate ground for establishing CWA jurisdiction. *See Precon Dev. Corp., Inc. v. U.S. Army Corps of Eng’rs*, 633 F.3d 288 (4th Cir. 2011). The Sixth Circuit has expressly not yet decided which test is controlling. *See United States v. Cundiff*, 555 F.3d 200, 210 (6th Cir. 2009). It appears that the Fifth Circuit has also not yet decided which test controls, *see United States v. Lucas*, 516 F.3d 316, 324–28 (5th Cir. 2008), although it has indicated—albeit in an unpublished decision—that jurisdiction could be established under either test, *see United States v. Lipar*, 665 F. App’x 322, 325 (5th Cir. 2016).

In view of these competing precedents interpreting *Rapanos*, and further uncertainty engendered by our later en banc decision in *United States v. Davis*, 825 F.3d 1014 (9th Cir. 2016), Robertson argues that Justice Kennedy’s test from *Rapanos* is not the controlling test for determining CWA jurisdiction, and that the trial Court erred by basing the jury instructions on Justice Kennedy’s test.

III

Robertson’s primary argument is that *City of Healdsburg* is not binding in light of *Davis*. He asserts that under the “reasoning-based” framework established by *Davis*, the *Rapanos* plurality opinion is controlling. In reaching this conclusion, Robertson argues that the court cannot consider Justice Stevens’s dissent. He argues that if we do not adopt the plurality decision as controlling, we must conclude that “no single rationale commanded a majority of the *Rapanos* court.”

In *Marks v. United States*, the Supreme Court explained that “[w]hen a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, ‘the holding of the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds.’” 430 U.S. 188, 193 (1977) (quoting *Gregg v. Georgia*, 428 U.S. 153, 169 n.15 (1976) (opinion of Stewart, Powell, and Stevens, JJ.)).

Recognizing the difficulty that courts have faced in discerning what the Supreme Court meant by “narrowest grounds,” we took *Davis* en banc to clarify the approach courts should take in applying *Marks* to fractured Supreme Court decisions. See *Davis*, 825 F.3d at 1021–22. We adopted a “reasoning-based approach to applying *Marks*.” *Id.* at 1021. As we explained,

[W]hen applying *Marks* to a fractured Supreme Court decision, we look to those opinions that concurred in the judgment and determine whether one of those opinions sets forth a rationale that is the logical subset of other, broader opinions. When, however, no “common denominator of the Court’s reasoning” exists, we are bound only by the “specific result.”

Id. at 1028. In *Davis*, we also assumed, without deciding, that dissenting opinions may be considered as part of a *Marks* analysis. *Id.* at 1025; see also *id.* at 1025 n.12.

As explained above, in *City of Healdsburg*—relying on *Gerke* and taking into account the *Rapanos* dissent—we held that Justice Kennedy’s “concurrence is the narrowest ground to which a majority of the Justices would assent if forced to choose in almost all cases.” *City of Healdsburg*, 496 F.3d at

999. As *Davis* had not yet clarified the issue, we did not engage in a reasoning-based *Marks* analysis to reach this conclusion. Instead, we relied on and accepted the Seventh Circuit's explanation in *Gerke* as to why Justice Kennedy's concurrence provided the controlling rule. *See id.* at 999–1000. Although the Seventh Circuit did not engage in an explicit reasoning-based analysis, the underlying rationale in *Gerke* is not inconsistent with that analysis.

To assess Robertson's claim that the district court applied the wrong standard to determine whether there was insufficient evidence to conclude that Robertson discharged pollutants into United States waters without a permit, we must first decide whether the en banc decision in *Davis* rendered inapplicable our prior conclusion in *City of Healdsburg* that Justice Kennedy's concurrence in *Rapanos* would control our decision about what are waters of the United States.

Our court in *Miller v. Gammie*, established the general rule that a three-judge panel is not allowed to disregard a prior circuit precedent, but rather must follow it unless or until change comes from a higher authority. 335 F.3d 889, 893 (9th Cir. 2003) (en banc). Higher authority includes decisions by en banc panels of our court. *Overstreet v. United Bhd. of Carpenters & Joiners of Am., Local Union No. 1506*, 409 F.3d 1199, 1205 n.8 (9th Cir. 2005).

This raises the issue whether the precedent of *City of Healdsburg* should have been disregarded by the court below in light of the later en banc decision in *Davis*. *Miller v. Gammie* sets the rule that the district court below had to follow *City of Healdsburg* unless it was “clearly irreconcilable” with *Davis*. *Miller v. Gammie*, 335 F.3d at 893. So the controlling issue on whether *City of Healdsburg* correctly stated the standard for what are waters of the

United States, relying on Justice Kennedy's concurrence in *Rapanos*, is whether *City of Healdsburg* is clearly irreconcilable with *Davis*. If so, we should disregard it. But if not, *City of Healdsburg* remains controlling. It is to that question that we now turn.

Some elaboration on the standard developed in *Miller v. Gammie* is helpful here. In that case we considered when “a three-judge panel is free to reexamine the holding of a prior panel in light of an inconsistent decision by a court of last resort on a closely related, but not identical issue.” 335 F.3d at 899. The issue before us was whether, in light of intervening Supreme Court authority outlining a functional test for evaluating when immunity applied, a three-judge panel should have disregarded prior Ninth Circuit authority granting absolute immunity to social workers. *Id.* at 900. Our en banc panel in *Miller v. Gammie* held that in cases of “clear irreconcilability, a three-judge panel of this court and district courts should consider themselves bound by the intervening higher authority and reject the prior opinion of this court as having been effectively overruled.” *Id.*

The “clearly irreconcilable” requirement is “a high standard.” *Rodriguez v. AT&T Mobility Servs. LLC*, 728 F.3d 975, 979 (9th Cir. 2013) (internal quotation marks omitted). So long as the court “can apply our prior circuit precedent without running afoul of the intervening authority” it must do so. *Lair v. Bullock*, 697 F.3d 1200, 1207 (9th Cir. 2012) (internal quotation marks omitted). “It is not enough for there to be some tension between the intervening higher authority and prior circuit precedent, or for the intervening higher authority to cast doubt on the prior circuit precedent.” *Id.* (internal quotation marks and citations omitted).